

Title (en)

INSECT VIRUSES, SEQUENCES, INSECTICIDAL COMPOSITIONS AND METHODS OF USE

Title (de)

INSEKTEN VIRUS, SEQUENZEN, INSEKTIZIDE ZUSAMMENSETZUNGEN UND DEREN VERWENDUNGEN

Title (fr)

VIRUS D'INSECTES, SEQUENCES DESDITS VIRUS, COMPOSITION INSECTICIDES ET PROCEDES D'UTILISATION

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Application

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Abstract (en)

[origin: US5858353A] Insect viruses capable of killing at least one target insect pest quicker than previously described viruses and DNA sequence conferring that phenotype of faster killing are provided. Further improvement in the speed of killing is obtained when the virus of this invention also contains a nonfunctional egt gene to reduce feeding by the infected larvae, inhibit growth and further mediate the earlier death of the infected insect. A specifically exemplified faster-killing insect virus is the V-8 strain of AcMNPV. The faster killing phenotype is carried on a MluI to EspI fragment from 1.93 to 3.27 map units within the AcMNPV genome, and its sequence is provided herein as SEQ ID NO:3. V8vEGTDEL is the egt-inactivated derivative of AcMNPV V-8; the combination of the increased virulence of the V-8 genotype, for example, and the inactivation of the gene encoding ecdysteroid glycosyl transferase provides further improvement (as further decrease in time after infection until insect death). Additionally, such an EGT-deficient baculovirus may be still further modified to express a protein which affects ecdysis. Methods for producing the faster-killing insect virus, improved insecticidal compositions and improved methods of controlling insects are also included within the scope of this invention.

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